



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,916	02/27/2004	Jon Washington	D-1208	7498
28995	7590	12/28/2004	EXAMINER	
RALPH E. JOCKE 231 SOUTH BROADWAY MEDINA, OH 44256			PAIK, STEVE S	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/788,916

Applicant(s)

WASHINGTON ET AL.

Examiner

Steven S. Paik

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 45-63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 45-63 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/30/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Response to Amendment***

1. Receipt is acknowledged of the Amendment filed October 12, 2004. The Amendment includes a newly added claim 63.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 45-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coutts (US 5,563,393) in view of Haycock (US 6,065,672).

Re claim 1, 55 and 63, Coutts discloses a plurality of automated teller machines (ATMs) in an ATM network (Fig. 1; Coutts discloses a business system including a plurality of terminals in the form of ATMs 10. Furthermore, system is defined as a network of related computer software, hardware, and transmission devices). Each of the ATM (10) includes a plurality of currency cassettes (col. 6, ll. 8-10) for holding supplies of currency notes. Each of cassettes includes at least one data indicator (cassette present sensors 42 and cassette low sensors 44 sense the data of presence of a cassette and the level of currency supplied in each cassette) indicating data representative of a characteristic of cassette currency (presence of currency cassette and detection of the supply level of currency quantity in the cassette). The ATM further includes at least one cassette reader (CPU 45 inside of the ATM collects and processes data read/detected by sensors 22-44. The CPU then transmits the data wirelessly to an interface device 12 via a modem

Art Unit: 2876

and an RF transceiver) for remotely reading the data of a data indicator (any of data indicators 22-44) without contact therebetween (As appreciated by an artisan in the art, the wireless transceiver between the ATM 10 and the interface device 12 may well be applied among the sensors the CPU for the purpose of minimizing physical wire connections among them.).

Coutts suggests tracking the levels of currency in the currency cassette, but does not explicitly disclose tracking the amount of currency in at least one of the ATMs in real time.

Haycock discloses a method and system for currency distribution, tracking and management utilizing a unique standardized cassette (100). Each cassette contains a smart card (110) capable of storing electronic data reflecting the note history for all the notes found within the cassette. Data can be downloaded to or uploaded from the smart card via an appropriate coupling device in various known methods. The cassettes may be color-coded to easily identify the denomination contained therein, and the smart card is capable of providing detailed distribution and tracking information of each note in real time. The standardized currency cassettes containing smart cards have advantages of improved efficiency of replenishing currency due to the color-coded and standard sizes. The cassettes further provide automated distribution history of each note resulting efficient detection of possible counterfeits.

In view of Haycock, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further employ a real time currency tracking cassette in addition to the automated teller machine of Coutts due to the fact that more data related to the distribution and tracking information of currency can be processed in real time for the purposes of improving the replenishing process of currency and other consumable items and detecting the activities of perpetrators creating counterfeits. Furthermore, such modification of employing a

Art Unit: 2876

standardized currency cassette with a smart card to the teachings of Coutts would have been an obvious matter of design variation, well within the ordinary skill in the art, and therefore an obvious expedient.

Re claim 45, Coutts in view of Haycock discloses the system as recited in rejected claim 1 stated above, wherein the network can track the amount of currency in each automated banking machine in the network (col. 1, ll. 5-10 of Haycock).

Re claim 46, Coutts in view of Haycock discloses the system as recited in rejected claim 45 stated above, wherein the network can determine the amount of currency in the network (col. 2, ll. 43-60 discloses a plurality of ATMs in a form of a network).

Re claim 47, Coutts in view of Haycock discloses the system as recited in rejected claim 46 stated above, wherein the network is operative to provide currency information in real time (col. 5, ll. 45+).

Re claim 48, Coutts in view of Haycock discloses the system as recited in rejected claim 1 stated above, wherein the network includes at least one computer (Fig. 2 of Coutts; col. 4, ll. 10+ suggests the centralized data management system comprising a computing means for updating note circulation history and other currency related information).

Re claim 49, Coutts in view of Haycock discloses the system as recited in rejected claim 48 stated above, wherein each automated banking machine includes at least one computer (Fig. 2 of Coutts discloses a CPU 45).

Re claim 50, Coutts in view of Haycock discloses the system as recited in rejected claim 49 stated above, wherein the network is operative to communicate with each automated banking machine (Fig. 4 of Coutts).

Art Unit: 2876

Re claim 51, Coutts in view of Haycock discloses the system as recited in rejected claim 50 stated above, wherein the communication involves the Internet (It is well known that ATMs are connected to a proprietary network of a financial institution as well as the Internet for convenient usages of its users and operators).

Re claim 52, Coutts in view of Haycock discloses the system as recited in rejected claim 1 stated above, wherein at least one data indicator includes data representative of the value of currency in a cassette (color coding; col. 4, ll. 27-42).

Re claim 53, Coutts in view of Haycock discloses the system as recited in rejected claim 1 stated above, wherein at least one data indicator includes data representative of the amount of currency in a cassette (tracking of individual notes; col. 4, ll. 27-42).

Re claim 54, Coutts in view of Haycock discloses the system as recited in rejected claim 1 stated above, wherein the at least one cassette reader (interface device 12; col. 2, ll. 42+) is operative to remotely read the data of a data indicator using a radio frequency.

Re claim 56, Coutts in view of Haycock discloses the system as recited in rejected claim 55 stated above, wherein (b) includes remotely reading the data of each data indicator of each automated banking machine (via the interface device 12 in RF communication).

Re claim 57, Coutts in view of Haycock discloses the system as recited in rejected claim 56 stated above, wherein (c) includes determining the amount of currency in each of the automated banking machines (col. 1, ll. 5-10 of Haycock) using the data read in (b).

Re claim 58, Coutts in view of Haycock discloses the system as recited in rejected claim 57 stated above, further including (d) determining the amount of currency in the network (col. 2, ll. 43-60 of Haycock discloses a plurality of ATMs in a form of a network).

Art Unit: 2876

Re claim 59, Coutts in view of Haycock discloses the system as recited in rejected claim 58 stated above, wherein (d) includes tracking the amount of currency in the network in real time (col. 5, ll. 45+).

Re claim 60, Coutts in view of Haycock discloses the system as recited in rejected claim 55 stated above, wherein each automated banking machine includes at least one cassette reader (interface device 12), wherein the at least one cassette reader is operative to remotely read the data of a data indicator without contact therebetween (RF communication technique) , and wherein (b) includes remotely reading the data of each data indicator (such as sensor signals 22-44) of each automated banking machine without contact between a data indicator and a cassette reader.

Re claim 61, Coutts in view of Haycock discloses the system as recited in rejected claim 60 stated above, wherein the at least one cassette reader (interface device 12) is operative to remotely read the data of a data indicator using radio frequency, and wherein (b) includes remotely reading the data of each data indicator of each automated banking machine using radio frequency (col. 2, lines 43+ of Coutts).

Re claim 62, Coutts in view of Haycock discloses the system as recited in rejected claim 55 stated above, wherein the network includes a host computer (col. 4, ll. 10+ of Haycock suggests the centralized data management system comprising a computing means for updating note circulation history and other currency related information), wherein each automated banking machine includes a computer (Fig. 2 of Coutts) and further including (d) communicating between the host computer and at least one automated banking machine computer (The

Art Unit: 2876

centralized data management system is always in communication with ATMs and/or other currency management system.).

*Response to Arguments*

4. Applicant's arguments filed October 12, 2004 have been fully considered but they are not persuasive.

On pages 9 and 10 of the Remarks, the applicant states:

The Applicants respectfully disagree with the Office's interpretation of Coutts.

1. Where does Coutts discuss the alleged ATM network? Where does Coutts even mention a network? Coutts' Figure 1 appears to show ATMS (10) and an interface device (12) in an enclosure, with the enclosure having a door.

The Examiner respectfully requests the applicant to review and reconsider Coutts' disclosure regarding Figure 1. The reference discloses that there is shown in Fig. 1 a **business system** including a **plurality of terminals, in the form of ATMs (10)**, and an operator interface device 12, in the form of an adapted note pad personal computer. The word system is defined as a **network** of related computer software, hardware, and data transmission devices (dictionary.com). Accordingly, the examiner interprets that Coutts' reference anticipates the claimed ATM network.

2. Where does Coutts teach or suggest that a currency cassette (instead of the ATM) includes the cassette present sensor (42) and the cassette low sensor (44)? Coutts teaches that these sensors (42, 44) are positioned within the ATM (col. 3, last line to col. 4, first line). Coutts' sensor (44) is for detecting when the supply of currency in a cassette is low.

The cassette present sensors 42 and cassette low sensors 44 sense the data of presence of a cassette and the level of currency supplied in each cassette. The sensors read, sense, or detect



Art Unit: 2876

at least one signal generated from a currency cassette. In particular, data indicating the level of currency supplied in each cassette has to come from the currency cassette. The sensors within the ATM read, sense, or detect the data and transmit them to a CPU45 within the ATM.

Therefore, the examiner respectfully disagrees with the applicants' interpretation of the cited prior arts.

3. In Coutts the interface device (12) is separate from each ATM (col. 2, lines 31-34). Thus, it is unclear how an ATM can include the interface device (12; the alleged cassette reader). Furthermore, where does Coutts teach or suggest that the interface device (12) reads data from a cassette's data indicator? As previously discussed, the sensors (22-44; the alleged data indicators) are positioned within the ATM (instead of a cassette).

The sensors send the sensed, or detected data from each parts of the ATM to the CPU 45. The CPU is coupled to an RF transceiver 19 via a modem. The RF transceiver is in communication with the interface 12 in a wireless manner. Thus, the interface device 12 reads data from a cassette's data indicator.

4. Where does Coutts teach or suggest the tracking the levels of currency in currency cassettes? Where does Coutts teach or suggest the tracking of any currency? Where does Coutts even mention tracking?

The examiner respectfully requests the applicants to review the last non-final office action mailed July 14, 2004. In the office action, the examiner admitted that the teachings of tracking amount of currency in at least one of the ATMs in real time is not taught by Coutts. Therefore, it is believed that the argument is moot.

Art Unit: 2876

Regarding dependent claims that depends directly or indirectly from an independent claim, the rejections are maintained at this time for the reasons discussed above. In conclusion, claims 1 and 45-63 are rejected under 35 U.S.C. § 103 (a) as set forth above.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 571-272-2404. The examiner can normally be reached on Mon - Fri (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2876

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven S. Paik  
Primary Examiner  
Art Unit 2876

ssp